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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/904,975	07/12/2001	Dan W.C. Delmer	DELME-P2739	3783
21259	7590	12/03/2008	EXAMINER	
J. MARK HOLLAND AND ASSOCIATES 3 SAN JOAQUIN PLAZA SUITE 210 NEWPORT BEACH, CA 92660			DUNWOODY, AARON M	
ART UNIT	PAPER NUMBER			
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MAIL DATE	DELIVERY MODE			
12/03/2008	PAPER			

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 09/904,975	Applicant(s) DELMER, DAN W.C.
	Examiner Aaron M. Dunwoody	Art Unit 3679

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If no period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(o).

Status

1) Responsive to communication(s) filed on 18 August 2008.

2a) This action is FINAL. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 2,3,5-7 and 35-53 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 2,3,5-7 and 35-53 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
 3) Information Disclosure Statement(s) (PTO/SB/08)
 Paper No(s)/Mail Date _____

4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date _____

5) Notice of Informal Patent Application
 6) Other: _____

DETAILED ACTION

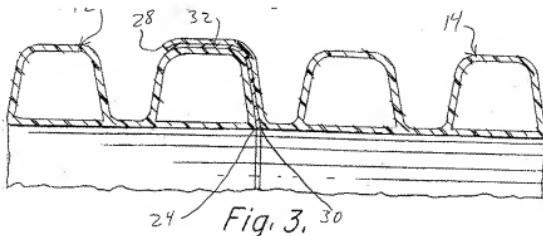
Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 35-42 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 35-42 are drawn to a stretching tool or a temporary stretching-holding device; however, it is not clear to the Examiner how elements further limit the elected invention/apparatus, as illustrated in Figure 3 below of the instant application.



The stretching tool and temporary stretching-holding device are not required to meet the claim limitations of independent claim 2, as evidenced by Applicant's restriction election filed 7/3/2006. The stretching tool and temporary stretching-holding device, illustrated Figures 5 and 17 below, are not part of the final apparatus illustrated above and claimed in the instant application.

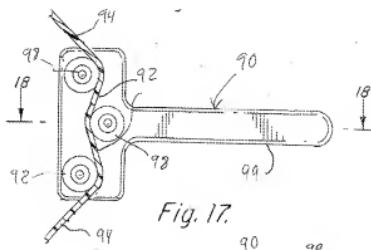
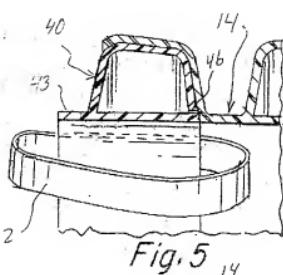


Fig. 17.

The stretching tool and temporary stretching-holding device are tools used to form the end of the pipes, which ends can be formed by various other methods that do not include a stretching tool and a temporary stretching-holding device. At best, the stretching tool and temporary stretching-holding device can be considered intermediate devices that do not represent the final apparatus as claimed in independent claim 2.

Claims 35 and 37 recite the following product-by-process:

35. (Currently Amended) The apparatus of Claim 2, in combination with further including a stretching tool having a channel formed to receive into which an edge of said first piece of pipe can be inserted in its the pipe's originally fabricated shape, said stretching tool including means to temporarily deform said edge of said first piece of pipe.

37. (Currently Amended) The apparatus of Claim 2, further includingin combination with a temporary stretch-holding device, said stretch-holding device includinghaving a first portion for temporary insertion into said temporarily deformed female structure of said first pipe piece, said first portion being sized and configured toretain a sufficient degree of deformation ofhold said temporarily deformed female structure in a size that is (a) sufficiently larger than its originally fabricated shape so that, upon removal ofsaid temporary stretch-holding device fromsaid temporarily deformed female structure to permit eventual insertion of a non-deformed end of said second piece of pipe in place of said stretch-holding device and (b) sufficiently small that the material memory action may be inserted into engagement with of said female structure will be retained to cause said female structure to reduce toward its original size upon removal of said stretch-holding device from said female structure.

The process by which an apparatus formed is not given patentable, only the final apparatus is considered for patentability, and the stretching tool and temporary stretching-holding device are obviously not part of the final apparatus illustrated above. Therefore, the Examiner is unable to determine the meets and bounds of claims 35-42, as these claims fail to further limit independent claim 2, making it impossible for the Examiner to apply an art rejection.

Further, Applicant is reminded that on 11/4/2008 and 73/2006, Applicant elected, without transverse, an apparatus which did not include the stretching tool or temporary stretching-holding device.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 2, 5, 6, 43-47, 49 and 50 are rejected under 35 U.S.C. 102(e) as being anticipated by US patent 6416667, Graves.

In regards to claims 2, 43-47, 49 and 50, Graves discloses an apparatus for joining a plurality of pieces of pipe, including:

a first piece of pipe (23) and a second piece of pipe (24) each having a similar size and shape sidewall corrugation pattern along their lengths, the corrugation including a generally repeating sinusoidal pattern in cross section having alternating portions (a) radially more distant from a longitudinal centerline of the pipe and (b) radially less distant from that centerline;

a male engagement structure formed from the sidewall corrugation pattern of the first piece of pipe, the male engagement structure terminating longitudinally at a location along the corrugation pattern that is generally within the radially less distant portion of the corrugation pattern;

a female engagement structure formed from the sidewall corrugation pattern of the second piece of pipe, the female engagement structure terminating longitudinally

with a generally open end for receiving the male engagement structure, the termination occurring at a location along the corrugation pattern that is generally within the radially more distant portion of the corrugation pattern,

the first female structure being temporarily deformable to receive the male structure, the temporary deformation being both sufficiently large to permit the insertion of the male structure but also sufficiently small to ensure that material memory returns the first female structure toward its original non-deformed configuration with sufficient compressive force to grip the male structure and to help prevent its inadvertent removal from engagement with the first female structure.

In regards to claim 5, Graves discloses in which said first piece of pipe includes a second female engagement structure remote from said first female structure, said second female structure also being temporarily deformed to function as a female structure for receiving a corresponding non-deformed end of a third piece of pipe, said third piece of pipe having a sidewall corrugation pattern along its length that is similar in size and shape to the sidewall corrugation pattern of said first and second pieces of pipe.

In regards to claim 6, Graves discloses a sealing element (107) positioned between confronting surfaces of said first and second pieces of pipe to help provide a watertight seal therebetween.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3, 7, 48 and 51-53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Graves in view of US patent 3330303, Fochler.

In regards to claims 3, 48 and 51, Graves discloses the claimed invention except for an internal non-corrugated liner element. Fochler teaches an internal non-corrugated liner element (14) to support the surrounding outer corrugated tube (col. 3, lines 11-12). As Fochler relates to composite tubing structures, it would have been obvious to one having ordinary skill in the art at the time the invention was made to provide an internal non-corrugated liner element to support the surrounding outer corrugated tube, as taught by Fochler.

In regards to claim 7, Fochler further teaches an adhesive material acting between confronting surfaces of said first and second pieces of pipe.

In regards to claim 52, Graves in view of Fochler disclose the confronting ends of the respective internal non-corrugated liner elements of the respective pieces of pipe generally form a butt joint with each other, the butt joint providing a substantially smooth interior transition surface longitudinally between the respective pipe elements.

In regards to claim 53, Graves in view of Fochler include a sealing gasket element between the confronting ends of the respective internal non-corrugated liner elements of the respective pieces of pipe.

Response to Arguments

Applicant's arguments filed 8/18/2008 have been fully considered but they are not persuasive.

Applicant argues that the stretching tool and temporary stretching device are required as part of the final apparatus. The Examiner disagrees. The original disclosure recites:

[5] Yet another object of my invention is the provision of apparatus and methods of the aforementioned character, including providing a stretching tool for use in connection with the apparatus and methods. Among the many alternative embodiments, the tool can be a heating element to soften the end to be deformed, or can deform the end mechanically. In the latter approach, a channel can be provided in the tool, into which an edge of the first piece of pipe can be inserted in its originally fabricated shape, with the tool including means to temporarily stretch or deform the edge to the female end configuration capable of receiving the non-deformed end of the second pipe piece. The mechanical tool embodiments

can include a plurality of rollers positionable along the inside and outside surfaces of the eventual female end of the first piece of pipe, and can further include means for exerting force to act between the rollers and the eventual female end to deform the female end from its originally fabricated shape.

[6] A still further object of my invention is the provision of apparatus and methods of the aforementioned character, including a temporary stretch-holding device for use in connection with the apparatus and methods. Among the many alternative embodiments, the device can include a first portion for temporary insertion into the deformed female end of the first pipe piece. Preferably, the first portion is sized and configured to retain a sufficient degree of the deformation of the female end so that, upon the removal of the device from the female end, the non-deformed end of the second piece of pipe may be inserted into engagement with the female end. The device can also include a second portion to assist in desired removal of the device from its temporary insertion into the deformed female end.

[7] Still another object of my invention is the provision of apparatus and methods of the aforementioned character, in which the temporary stretch-holding device is a generally annular ring element fabricated with a cross-sectional sidewall pattern that is similar in size and shape to the cross-sectional sidewall pattern of the first piece of pipe, and the second portion includes a radial cut to allow a degree of compression of the cross-sectional pattern to facilitate the desired insertion into and removal from the female end. Among the many alternative embodiments, the temporary stretch-holding device can likewise be fabricated with a cross-sectional sidewall pattern that is similar in size and shape to the cross-

sectional sidewall pattern of the first piece of pipe, and the second portion includes an axially lengthwise cut to allow a degree of compression of the device to facilitate the desired insertion into and removal from the female end. In certain embodiments, the second portion can include a strap element or grippable portion, or both, upon which force can be exerted to effect the desired removal of the device from the deformed female end. In some embodiments, the temporary stretch-holding device can also be sized and configured to cover the pipe joint after the device is removed from its temporary engagement within the female end.

[8] An additional object of my invention is the provision of apparatus and methods of the aforementioned character, including the steps of: (1) providing a plurality of pipe pieces fabricated with a substantially uniform cross-sectional sidewall pattern along their length, (2) stretching a first end of at least one of the pipe pieces sufficiently to permit the insertion of a non-stretched end of another piece of the pipe without stretching the first end so far as to destroy its material memory; (3) inserting the non-stretched end of the another piece of the pipe into the stretched first end, and (4) allowing the material memory of the stretched end to return the first end toward its original non-stretched configuration with sufficient compressive force to grip the non-stretched end of the another piece of the pipe and prevent its inadvertent removal from engagement with the stretched end.

Clearly, the stretching tool and temporary stretching device are not required as part of the final apparatus.

Further, Applicant's election on 11/4/2008 and 73/2006 without transverse, recognized the apparatus being patentably distinct from the stretching tool and temporary stretching-holding device.

In response to applicant's argument that Graves is nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, Graves is reasonably pertinent to the particular problem of joining a plurality of pieces of pipe with which the applicant is concerned.

Applicant argues that Graves fails to use Applicant's terminology verbatim. The Examiner disagrees. Anticipation requires that a single prior art reference discloses, either expressly or under the principles of inherency, each and every element of the claimed invention. *In re King*, 801 F.2d 1324, 1326, 231 USPQ 136, 138 (Fed. Cir. 1986); *RCA Corp. v. Applied Digital Data Sys., Inc.*, 730 F.2d 1440, 1444, 221 USPQ 385, 388 (Fed. Cir.), cert. dismissed, 468 U.S. 1228 (1984). Anticipation, however, does not require such disclosure *in haec verba*. *In re Bode*, 550 F.2d 656, 660, 193 USPQ 12, 16 (CCPA 1977). In addition, it does not require that the prior art reference "teach" what the application at issue teaches. *Kalman v. Kimberly-Clark Corp.*, 713 F.2d 760, 218 USPQ 781 (Fed. Cir. 1983). Finally, Applicant is reminded that during

examination claim limitations are to be given their broadest reasonable reading. In re Zletz, 893 F.2d 319, 321, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989); In re Prater, 415 F.2d 1393, 1404-05, 162 USPQ 541, 550-51 (CCPA 1969). Therefore, the instant invention is anticipated by Graves.

Applicant argues that Graves fails to show elements have substantial requirement. The Examiner disagrees. Substantial does not connote "small" or "meager" it includes high range of "principally" or "entirely"; in view of evidence in file wrapper, court is not willing to extend it below 49%. -- E. W. Bliss Co. v. Cold Metal Process Co. (DC NOhio) 122 USPQ 238. Graves' elements clearly illustrate high range of "principally" or "entirely" not extending below 49% of said elements.

Applicant argues that Graves teaches away from various elements of the instant invention. The Examiner disagrees. Simply that there are differences between two references is insufficient to establish that such references "teach away" from any combination thereof. In re Beattie, 974 F.2d 1309, 1312-13, 24 USPQ2d 1040, 1042 (Fed. Cir. 1992).

Applicant argues Graves does not disclose a female structure having a temporary deformation to receive the male structure. The Examiner disagrees. As the female structure of Graves is formed from a polymeric/copolymeric material, it inherently has the ability to temporary deform to receive the male structure.

Further, Applicant is reminded that his invention is directed to an apparatus and not a method of forming.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aaron M. Dunwoody whose telephone number is 571-272-7080. The examiner can normally be reached on 7:30 am - 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on 571-272-7087. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Aaron M Dunwoody/
Primary Examiner, Art Unit 3679

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